ENGINEERING AND RELATED SERVICES JANUARY 6, 2012

CONTRACT NO. 4400002639 RETAINER CONTRACT FOR AERIAL PHOTOGRAPHY SERVICES STATEWIDE

Under Authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues a Request for Qualification Statements (RFQ) on DOTD Form 24-102 (24-102), "Professional Engineering and Related Services", revised November 2011, from Consulting Firms (Consultant) to provide engineering and related services. Consulting Firm will have previously produced vertical aerial photography as outlined by the US Department of Transportation Federal Highway Administration Reference Outline, Specifications for Aerial Surveys and Mapping by Photogrammetric Methods for Highways.

Project Manager – Mr. Gregory Gish

All inquiries concerning this advertisement should be sent in writing to Alan.Dale@LA.gov.

PROJECT DESCRIPTION

The selected Consultant will perform photogrammetric services for statewide projects covered by a Retainer Contract under separate Task Orders. The Consultant will be required to execute a Task Order which will specify the scope of services, contract time, and compensation. Each Task Order will become a part of the Retainer Contract.

SCOPE OF SERVICES

The selected Consultant will be required to provide some or all of the following Photogrammetric and related services for each Task Order (TO) either in film or digital format as requested by LA DOTD:

FLIGHT LINES

Flight lines shall be as shown on area map supplied by LA DOTD. Required negative scale and the required altitude of flight will be requested for each T.O. The flight lines shall be straight. Exposure capture will assure full stereoscopic coverage with 60% forward overlap and 25% side lap.

FILM

Only a fine-grain, high-intrinsic resolving power photographic emulsion on dimensionally stable, safe, film base shall be used. The light sensitivity range or emulsion type shall be approved beforehand by the LA DOTD Photogrammetrist. Out of date film shall not be used. The film should yield an image area of nine (9) inches by nine (9) inches for each exposed negative. The film leader and trailer length shall not be less than six (6) feet and three (3) feet, respectively. Allow one blank between projects. The camera data strip and mission exposure data strip will be in the negative margins.

FILM PHOTOGRAPHY

The product shall consist of black and white, vertical photographic negatives taken by the contractor using a precision-type aerial mapping camera. The negatives shall be suitable for printing appropriate photographic reproductions of the proper scale and size with sufficient stereoscopic overlap for use with precise photogrammetric instruments to make cadastral surveys and to compile planimetric maps and measure profiles and cross sections by photogrammetric methods at the scale and accuracy specified.

FILM AERIAL CAMERA

The camera will be a precision, serial exposure, aerial mapping film camera. It shall have the latest technologies available for aerial photography to increase photographic quality and efficiency of photogrammetric operation. The camera shall incorporate a gyrostabilized mount and forward motion compensation necessary to provide a 9" x 9" high-resolution film negative for use in digital photogrammetry. The camera shall not be operated in the "non-stabilized" mode except for single exposures. The camera shall be equipped with a vacuum or pressure device for holding the film flat at the instant of exposure. The platen against which the film is pressed shall not depart from the true plane by more than plus-or-minus five ten-thousandths (0.0005) an inch per inch. The camera must produce eight (8) fiducial marks on each negative, one on each corner and one on each side of the photographic exposure area. The lens cone for the aerial camera shall have a six (6) inch focal length.

The contractor shall supply a lens calibration report for the aerial camera used. The calibration shall be done by the US Geological Survey (USGS) and be current within the last three (3) years.

An appropriate light filter with an anti-vignetting coating shall be used. The optical characteristics of the filter shall be such that its addition and use shall not cause any undesirable reduction of image resolution, and shall not harmfully alter the optical characteristics of the camera lens.

DIGITAL PHOTOGRAPHY

The product shall consist of digital imagery taken by the contractor using a precision-type aerial mapping camera. The images shall be suitable for printing appropriate photographic reproductions of the proper scale and size with sufficient stereoscopic overlap for use with precise photogrammetric instruments to make cadastral surveys and to compile planimetric maps and measure profiles and cross sections by photogrammetric methods at the scale and accuracy specified. After post-processing, imagery should have the ability to be brought into all stages of the photogrammetric workflow - aerotriangulation, feature collection, DTM generation, and orthorectification.

DIGITAL CAMERA

The digital camera shall be a precision high-resolution stereo capable model. It shall have the latest technologies available for aerial photography to increase photographic quality and efficiency of photogrammetric operation. The gyrostabilized digital mount should compensate for roll, pitch, and yaw of the aircraft. Additionally, the mount's digital control should ensure precise operation, whether running in standalone mode or under the control of an inertial measurement unit (IMU).

AIRCRAFT

The aircraft, equipped with all the essential navigation and photographic instruments, and its crew, shall be selected by the qualified consultant. The performance of the aircraft, the crew, and file equipment shall be adequate for completion of the project in accordance with the agreement and shall conform to all official regulations and ordinances. A project planning and GPS guidance system is required to attain related flight data (specifics discussed below).

CRAB

Crab in excess of three (3) degrees may be cause for rejection of the flight line of negatives or portion thereof in which the crab occurs.

TILT

Negatives made with the optical axis of the aerial camera in a vertical position are desired. Tilt (departure of the aerial camera axis from a vertical line at the time of exposure) of any negative by more than three (3) degrees, or the tilt between any two successive negatives exceeding four (4) degrees will not be acceptable.

SCALE OF VERTICAL PHOTOGRAPHY NEGATIVES

Negatives having a departure from the specified scale of more than five (5) percent will not be acceptable (unless digital photography is specified).

WEATHER AND SUN ANGLE

Photography shall be undertaken only when well-defined images can be obtained. Photography shall not be attempted when the ground is obscured by haze, smoke, or dust, or when clouds or cloud shadows will appear on more than five (5) percent of the area of anyone photograph; Photography shall not contain shadows caused by topographic relief and sun angle, whenever such shadows can be avoided during the time of year the photography must be taken. Photography shall not be undertaken when the sun angle is less than 30 degrees above the horizon or when visibility is less than 4 miles.

QUALITY OF PHOTOGRAPHY

The photographic negatives shall be taken so as to prevent appreciable image movement at the instant of exposure. Exposure and processing shall be such that the negatives will be of high quality showing the demarcation of planimetric and topographic features discernable at the required scale. The negatives shall be free from static marks, shall have uniform color tone, and shall have the proper degree of contrast for all details to show clearly in the dark-tone areas and high-light areas as well as in the halftones between the dark and the light. The tone shall be uniform throughout the survey area. The negatives shall yield suitable prints on photographic paper.

PROCESSING OF EXPOSED FILM

The processing, including development, fixation, washing and drying of all exposed photographic film shall result in negatives free from chemical and other stains, contain normal and uniform density, and have fine-grain quality. The film shall not be rolled tightly or in any way stretched, distorted, scratched or marked during the processing. The film shall be free from finger marks, dirt, or blemishes of any kind.

UNEXPOSED FILM

Whenever any part of an unexposed roll of film remains in the camera, before such film is used on a subsequent day a minimum three-foot section of the roll shall be rolled forward unexposed immediately preceding the beginning of photography.

REFERENCES

All services and documents will meet the standard requirements as to format and content of the DOTD; and will be prepared in accordance with the latest applicable editions, supplements and revisions of the following:

- 1. AASHTO Standards, ASTM Standards or DOTD Test Procedures
- 2. DOTD Location and Survey Manual
- 3. DOTD Roadway Design Procedures and Details
- 4. DOTD Hydraulics Manual
- 5. DOTD Standard Specifications for Roads and Bridges

- 6. Manual of Uniform Traffic Control Devices
- 7. DOTD Traffic Signal Design Manual
- 8. National Environmental Policy Act (NEPA)
- 9. National Electric Safety Code
- 10. National Electric Code (NFPA 70)
- 11. DOTD Environmental Impact Procedures (Vols. I-III)
- 12. Policy on Geometric Design of Highways and Streets
- 13. Construction Contract Administration Manual
- 14. Materials Sampling Manual
- 15. DOTD Bridge Design Manual
- 16. Consultant Contract Services Manual
- 17. Geotechnical Engineering Services Document
- 18. Bridge Inspectors Reference Manual
- 19. DOTD Stage 1 Manual of Standard Practice

COMPENSATION

Compensation to the Consultant for services rendered in connection with each TO shall be based on negotiated work-hours using DOTD established billable rates for the actual work performed or a non-negotiated lump sum for each Task Order.

The amount payable under this Retainer Contract for services to be performed under the various TO's shall not exceed a maximum of \$1,500,000. Each TO shall be payable under the respective TO project number which shall be obtained by the Project Manager.

All travel related expenses will be compensated under direct expenses, and will be in accordance with Louisiana Office of State Travel regulations found at: http://www.doa.louisiana.gov/osp/travel/travelpolicy.htm. Vehicle rental rates will require prior approval from the DOTD Project Manager.

CONTRACT TIME AND NOTICE TO PROCEED

This Retainer Contract shall be in effect for the duration of **three years**. The services to be performed for each Task Order (TO) will be determined prior to the execution of the TO. The Consultant will proceed with the services required in the TO upon issuance of the Notice to Proceed from the DOTD. The contract time for each TO, will be specified in the executed TO. Any TO in effect, prior to the expiration date of the Retainer Contract shall be completed.

DELIVERABLES

For film, the consultant will manually deliver one (1) set of processed negatives and one (1) set of contact prints for each Task Order (TO). Each TO shall specify the description of the work required, the area and/or number of flight lines, altitude above average ground, compensation thereof and any other specific information required for that

particular TO. Each TO, following the execution by both parties, shall be made an integral part of this contract.

The digital imagery should have the ability to be brought into all stages of the photogrammetric workflow after post-processing - imagery aerotriangulation, feature collection, DTM generation, and orthorectification.

Additionally, the consultant will deliver all relevant GPS data for each TO that includes: date flown, photo index number (if applicable), camera lens used (example, Leica RC30, 13359), X,Y (latitude and longitude in decimal degrees format), planned bearing or heading tracked, altitude for each photograph captured and related data strip items in the executed TO. Any TO in effect, prior to the expiration date of the Retainer Contract shall be completed.

QUALITY CONTROL/QUALITY ASSURANCE

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program; in order to provide a mechanism by which all contracted services can be subject to a systematic and consistent review. Consultants must ensure quality and adhere to established design policies, procedures, standards, and guidelines in the preparation and review of all design products. The DOTD shall provide limited input and technical assistance to the Consultant.

MINIMUM PERSONNEL REQUIREMENTS

The following requirements must be met at the time of submittal:

- 1. The Prime Consultant must employ on a full time basis at least one licensed pilot with a minimum of five years of experience in flying aerial photography.
- 2. The Prime Consultant must employ on a full time basis at least one photographer with a minimum of five years of experience in shooting aerial stereo photography.
- 3. The Prime Consultant must employ on a full time basis at least one photographer with a minimum of five years of experience in dark room techniques suitable for aerial stereo photography processing.

EVALUATION CRITERIA

The general criteria to be used by DOTD (when applicable) in evaluating responses for the selection of a Consultant to perform these services are:

- 1. Consultant's firm experience on similar projects, weighting factor of 3;
- 2. Consultant's personnel experience on similar projects, weighting factor of 4;
- 3. Consultant's firm size as related to the estimated project cost, weighting factor of 3; **
- 4. Consultant's past performance on similar DOTD projects, weighting factor of 6; ***

- 5. Consultant's current work load, weighting factor of 5; ****
- 6. Location where the work will be performed, weighting factor of 4. *
- *Location will be based from Marksville, Louisiana.
- ** All respondents will receive no less that a 2 in this category.
- ***The Other (OT) performance rating will be used for this project.
- **** All respondents will receive a 4 in this category

Complexity level (complex)

Consultants will be evaluated as indicated in Items 1-6. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of 0-4. Then the rating will be multiplied by the corresponding weighting factor. The firm's ratings in each category will then be added to arrive at the Consultant's final rating.

If Sub-Consultants are used, the Prime Consultant must perform a minimum of 51% of the work for the overall project. Each member of the Consultant/Team will be evaluated on their part of the contract, proportional to the amount of their work. The individual team member ratings will then be added to arrive at the Consultant/Team rating.

Communication Protocol

DOTD's Project Evaluation Team will be responsible for performing the above described evaluation, and will present a short-list of the three (if three are qualified) highest rated Consultants to the Secretary of the DOTD. The Secretary will make the final selection. Below are the proposed Team members. DOTD may substitute for any reason provided the members meet the requirements of R.S. 48:291.

- 1. Alan Dale Ex officio
- 2. Gregory Gish Project Manager
- 3. Eric Lanier
- 4. Brenda Browning
- 5. Barton Rumsey
- 6. Stanley Ard

Rules of Contact (Title 48 Engineering and Related Services)

These rules are designed to promote a fair, unbiased, legally defensible selection process. The LA DOTD is the single source of information regarding the Contract selection. The following rules of contact will apply during the Contract selection process and will commence on the date of advertisement and cease at the contract execution by the selected firm. Contact includes face-to-face, telephone, facsimile, Electronic-mail (E-mail), or formal written communications. Any contact determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of the submittal (24-102):

- A. The Consultant shall correspond with the LA DOTD regarding this advertisement only through the LA DOTD Consultant Contracts Services Administrator:
- B. The Consultant, nor any other party on behalf of the Consultant, shall not contact any LA DOTD employees, including but not limited to, department heads; members of the evaluation teams; and any official who may participate in the decision to award the contract resulting from this advertisement except through the process identified above. Contact between Consultant organizations and LA DOTD employees is allowed during LA DOTD sponsored one-on-one meetings;
- C. Any communication determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of submittal, at the sole discretion of the LA DOTD;
- D. Any official information regarding the project will be disseminated from the LA DOTD'S designated representative on the LA DOTD website. Any official correspondence will be in writing;
- E. The LA DOTD will not be responsible for any verbal exchange or any other information or exchange that occurs outside the official process specified herein.

By submission of a response to this RFQ, the Consultant agrees to the communication protocol herein.

CONTRACT REQUIREMENTS

The selected Consultant will be required to execute the contract within 10 days after receipt of the contract.

INSURANCE - During the term of this contract, the Consultant will carry professional liability insurance in the amount of \$1,000,000. This insurance will be written on a "claims-made" basis. Prior to executing the contract, the Consultant will provide a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

AUDIT - The selected Consultant will allow the DOTD Audit Section to perform an annual overhead audit of their books, or provide an *independent* Certified Public Accountant (CPA) audited overhead rate. This rate must be developed using Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the Consultant will submit semi-annual labor rate information, when requested by DOTD.

The selected Consultant will maintain, an approved Project Cost System and segregate direct from indirect cost in their General Ledger. Pre-award and post audits, as well as interim audits, may be required. For audit purposes, the selected Consultant will maintain accounting records for a minimum of five years after final contract payment.

Any Consultant currently under contract with the DOTD and who has not met all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website (www.dotd.louisiana.gov), will not be considered for this project.

SUBMITTAL REQUIREMENTS

One original (**stamped "original"**) and **five** copies of the DOTD Form 24-102 must be submitted to DOTD. All submittals must be in accordance with the requirements of this advertisement and the Consultant Contract Services Manual. Any Consultant/Team failing to submit any of the information required on the 24-102, or providing inaccurate information on the 24-102, will be considered non-responsive.

Any Sub-Consultants to be used, including Disadvantaged Business Enterprises (DBE), in performance of this Contract, must also submit a 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant's 24-102 must be firmly bound to the Consultant's 24-102. In Section 9, the Consultant's 24-102 must describe the **work elements** to be performed by the Sub-Consultant(s), and state the approximate **percentage** of each work element to be subcontracted to each Sub-Consultant.

Name(s) of the Consultant/Team listed on the 24-102, must precisely match the name(s) filed with the Louisiana Secretary of State, Corporation Division, and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

The DOTD Form 24-102 will be identified with Contract No. 4400002639, and will be submitted prior to 3:00 p.m. CST on Thursday, January 26, 2012, by hand delivery or mail, addressed to:

Department of Transportation and Development Attn.: Mr. Alan Dale, P.E. Contracts Administrator 1201 Capitol Access Road, **Room 405-T** Baton Rouge, LA 70802-4438 or Telephone: (225) 379-1401

REVISIONS TO THE RFQ

DOTD reserves the right to revise any part of the RFQ by issuing an addendum to the RFQ at any time. Issuance of this RFQ in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all Qualification Statements submitted and/or cancel this announcement if it is determined to be in DOTD's best interest. All materials submitted in response to this announcement become the property of DOTD and selection or rejection of a submittal does not affect

this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the RFQ.